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FIRST TERM ENLISTED ATTRITION

VOLUME II: SUMMARY

H. WALLACE SINAICO

**MANPOWER RESEARCH AND ADVISORY SERVICES
SMITHSONIAN INSTITUTION**

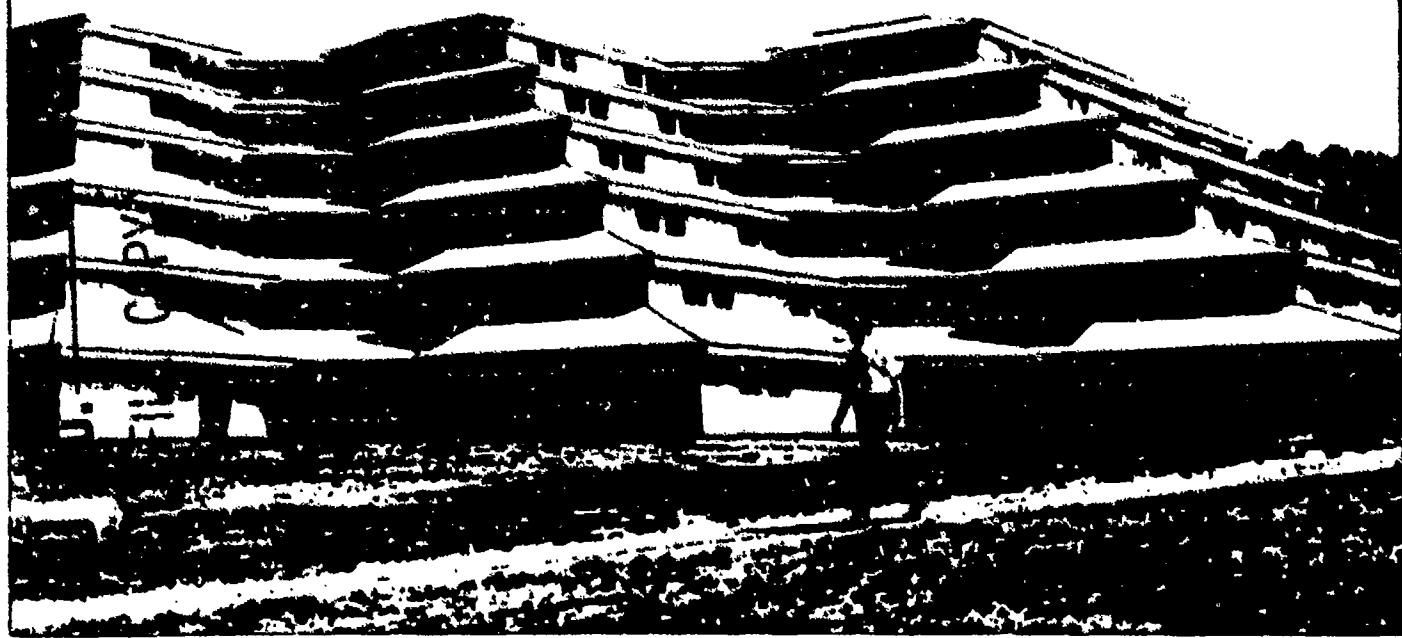
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19. KEY WORDS (Continue on reverse side if necessary and identify by block number) military personnel personnel attrition personnel research personnel retention dropping out coping skills attrition costs causes of attrition military manpower policy occupational mobility organizational effectiveness personnel effectiveness	ABSTRACT (Continue on reverse side if necessary and identify by block number) During April 4-7, 1977, the Office of the Secretary of Defense and the Office of Naval Research co-sponsored a Conference on First Term Enlisted Attrition. The purposes of the meeting were: a) to review what is known about attrition in the Services—its magnitude, current trends and costs, and how it is managed; b) to learn about relevant research—both inside and out of the DOD—that deals with attrition; and c) to identify gaps in our knowledge that could be addressed by new R&D.	
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Participants in the conference included: uniformed representatives of each of the Services; civilian scientists and research managers from the main DOD personnel and manpower laboratories; academic scientists; and contractors currently working on attrition-related matters. The meeting consisted of five types of sessions: (a) a keynote address; (b) general sessions in which technical papers were presented; (c) small workshop meetings providing the opportunity for informal discussion; (d) a roundtable discussion by flag officers; and (e) a final session in two parts: comments by a half-dozen discussant-critics and papers by representatives of the two principal sponsors within OSD, i.e., the Assistant Secretary of Defense (Manpower and Reserve Affairs) and the Office of the Director of Defense Research and Engineering.

This is the second of two reports on the conference. The first contained the technical papers that were presented at the meeting and summaries of OSD talks. This report is a summary of the research and policy recommendations coming from papers, discussants' remarks, and workshop sessions.

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FIRST TERM ENLISTED ATTRITION

Summary of a Conference

held at

Leesburg, Virginia

April 4-7, 1977

Volume II: Summary

H. Wallace Sinaiko

Manpower Research and Advisory Services
Smithsonian Institution

AUGUST 1977

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ACKNOWLEDGMENTS

The conference summarized in this report was planned by a steering committee whose deliberations and close cooperation took place over several months. Committee members, whose names appear in Appendix A, deserve a special thanks for their contributions.

Draft versions of this paper benefited greatly from the critical reviews of four people, and it is a pleasure to thank them publicly. They are: Mr. I. M. Greenberg, OASD(MR&L); COL Henry L. Taylor, USAF, ODDR&E(E&LS); and Drs. Glenn L. Bryan and Martin A. Tolcott, both of the Office of Naval Research.

Clerical and administrative responsibilities rested in the capable hands of my co-workers, Carol Blair and Becky Graham. In addition, Mrs. Graham handled editorial duties with characteristic dispatch and an uncompromising blue pencil.

H. Wallace Sinaiko
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Advisory Services
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BACKGROUND

Attrition among first term enlisted personnel in the Armed Forces is the failure of individuals to complete their initial service obligations. This report deals only with first term attrition, although some of the issues that are covered may pertain to attrition among career personnel as well.

Dropping out occurs for many reasons. It is not a new phenomenon, but since the advent of an all-volunteer force the rate of attrition has increased significantly.* This has led to concern at high levels for at least two reasons: 1) high costs and 2) impact on force readiness. Attrition is expensive because, as a way of filling in for those who drop out, the Services have to recruit more people than would be minimally needed; it is also expensive because of the cost of training the additional people and the loss of the training investment in those who leave. Readiness can be a victim of high attrition because there may not be enough experienced people available to carry out military missions.

In the summer of 1976, discussions took place between staff members of the Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs) and the Office of the Director, Defense Research and Engineering, about the role that research could play in addressing the attrition problem. From the start it was assumed that attrition is not a transient phenomenon requiring "quick fix" solutions and that the "attrition problem" was itself in need of better definition. Out of the discussions, a decision was reached to convene a conference that would address a number of issues: 1) What is the nature of first term enlisted attrition in the Armed Forces? 2) Are there data on the magnitude of the problem and its historic trends? 3) Is information available, from research or elsewhere, that could help ameliorate the problem? 4) Is there on-going research in the area that should be more closely followed by the Department of Defense? 5) Are there gaps in our knowledge about attrition that should be addressed by research?

APPROACH

Responsibility for organizing the conference was given to the Office of Naval Research Manpower R&D Program because that program had already mounted a research effort aimed at addressing Navy and Marine

* In 1970 the Gates Commission projected a 15% turnover rate for the enlisted all-volunteer force. But current projections (1977-1982) are for an average of 23% per year. (Congressional Budget Office, *The Costs of Defense Manpower: Issues for 1977*.)

Corps attrition. The Smithsonian Institution's Manpower Research and Advisory Services, under contract to the Office of Naval Research, assumed the role of executive agent for the meeting. A planning committee was named, with representatives coming from the R&D and manpower headquarters offices of each of the Services (see Appendix A) and from OASD(M&RA) and ODDR&E. The committee met monthly, and out of its deliberations the conference took shape. Members identified and discussed topics and candidate speakers. Final selections were based on topics' relevance to the main theme and on the committee's desire to provide the best available information. In addition to the contributors from in-house laboratories and Department of Defense (DOD) contractors, a number of speakers from outside the DOD were invited to participate. (Twenty-six papers were presented during the three-day conference. Vol. I of this report contains the papers.)

Six discussants were also named to provide observations and comments during the final session of the meeting. The discussants wrote post-meeting summaries; elements of these, where appropriate, have been incorporated into this report. Flag officers representing each of the Services' military manpower directorates were invited to conduct a two-hour, off-the-record roundtable discussion.* The conference was held during April 4-7, 1977, at the Xerox International Center for Training and Management Development, Leesburg, Virginia.

During two evenings of the conference, participants were assigned to small workshop groups. Workshop members were encouraged to speak to the main objective of the conference, i.e., the identification of research gaps. These sessions were also intended to provide an opportunity for informal discussions of the papers, the flag officers' round table, or any other topics related to the meeting. The workshops were seen as a way of building communication bridges between the Services and among the separate communities represented at the meeting, i.e., DOD researchers, manpower managers, and academic scientists. Each workshop had a chairman whose responsibility was to serve as a discussion leader and to record the main points made by his colleagues.**

ORGANIZATION OF THE REPORT

The remainder of this report contains two listings coming out of the conference. The first shows candidate areas for R&D support. Some are new areas but many are not. Most of the recommendations are intended

* Discussants' and flag officers' names may be found in the conference program, Appendix B.

** Workshop chairmen, whose help is gratefully acknowledged, are listed in Appendix C.

to fill gaps in our knowledge about attrition and what to do about it. The second and briefer list has policy and action recommendations. The information in both lists is based on one or more of these sources: the formal papers, comments of the discussants both during and after the conference, and summary notes submitted by workshop chairmen.

All of the recommendations are given without assessment of their merits or any attempt to set priorities. Questions of relevance, feasibility, probable effectiveness and cost have to be addressed by the research and manpower management components of both the DOD and the individual Services.

CANDIDATES FOR R&D SUPPORT

Organizational Issues

Mismatches in attitudes, values and expectations. Investigate the expectations the Services have of their recruits and the extent to which these fit the aspirations, attitudes and values of the recruits themselves. How do mismatches between the expectations of the organization and those of its entry-level people contribute to attrition? How do "receiving organizations," both military and other, deal with these mismatches during the absorption process for newcomers? The purposes of research in this area would be to clarify the ways the Services integrate enlistees and to provide guidance for reducing dissonance, where it exists, between organizations and new entrants (Gottlieb).^a

Organizational commitment. Investigate the degree of commitment which first term enlistees have to their Service and their immediate units. Try to learn the extent to which current military organizational practices contribute to, or inhibit, commitment. How is commitment to groups reinforced? The objective of this research would be to understand the means by which first termers get involved with and committed to their units; it would lead to the development of techniques for generating commitment and, subsequently, to lowered attrition (Gottlieb; Porter & Steers; Hulin).

Turbulence. Investigate the effects on attrition of turbulence caused by frequent transfers between units and bases. How does this mobility contribute to or detract from individuals' ability to identify with their units and unit goals? The purpose of research in this area would be to understand the impact of turbulence and to set appropriate limits on practices which contribute to it. (Canter).

^a Where a recommendation is based on one of the conference papers the author's name is given parenthetically.

Peer influences. Investigate the influence of peer relationships on attrition. Does peer influence cause or reduce attrition? To what extent is the inability of individuals to develop identification with peers a cause of attrition? If peers are found to play an important role, does it follow that there can be a cascading effect in that attrition causes more attrition? Can peers be used to control or reduce attrition? The objective of this research would be to develop organizational practices that reinforce desirable peer relationships (Canter).

Unit variance. Identify samples of military units having either very high or very low attrition rates. Conduct case studies in those units with special attention to the issues described above. Can any distinctive organizational patterns be discerned for units having very good or very poor attrition records? Does the "regimental concept" offer promise as a way of providing the cohesion and esprit that are supposed to keep attrition in check? (The "regimental concept" builds and retains, over relatively long periods, units—e.g., ships crews or air squadrons—that train and are deployed with little or no personnel turnover.) The goal of this work would be to determine the factors affecting unit variance vis-a-vis attrition and to propose intervention strategies. Field experimentation would be an appropriate method for testing interventions.

Recruiting Issues

- Alternative sources of manpower. Assess the potential value of older enlistees. The fact that these people have passed through the age of maximum occupational change suggests that they would be less attrition-prone. Investigate the experiences of various government programs such as Peace Corps, VISTA, et al., vis-a-vis older recruits (Gottlieb).

- Determine the proportion of an over-twenty target group with any predilection to enlist and what incentives would be required.

- Study what the training implications would be for an older group of recruits. (E.g., should these men be sent through the traditional rigorous recruit training?)

- Explore other sources of manpower, e.g., junior college graduates, women, low aptitude people, people having minor physical disabilities; and relate their attributes to the Services' job requirements. The objective of this research is to have available the necessary information for acquiring and utilizing alternative manpower resources should this become necessary.

Recruiting process. Investigate what recruiters do in the field. To what extent do they follow such service guidelines as directives on testing? How do the individual Services' pressures to meet quotas affect the process?

There have been allegations, and there is some supporting evidence, that some attrition can be traced to misleading information provided by recruiters (M. Greenberg; Mobley, Hand, & Logan). The Services should establish what proportion of attrition is due to oversell or enlistees' entering into contracts that are not fulfilled by their respective Services.

- Recruiters themselves should be the subject of inquiry: How can their work be enhanced? e.g., can they be provided with prediction techniques (not tests), or can new reward systems be developed for the recruiting force? Is there utility in instituting a "charge back" penalty, or other negative reward, for recruiters who generate large numbers of attritors? Can positive reinforcers, such as bonuses, be used to reward recruiters whose enlistees become outstanding performers? (Belknap)

- Develop and try out ways to enhance the communication process between applicants for military service and recruiters (Wiskoff).

- Recruiter selection and training has been the subject of research and it should continue to receive attention. A specific objective of this research would be to develop criteria for assessing recruiters. The recruiter's "attrition score" might become part of a larger criterion measure.

Expectations of first term enlistees. Incorporate information about the realities of service life in new approaches for the orientation and indoctrination of recruits. Can such information be provided early during training or, perhaps, before a recruit begins training? What are the most effective modes for imparting such information? To what extent should the recruiter provide this orientation? Would it be counter-productive for him?

The objective of new indoctrination approaches is similar to that of an earlier point having to do with mismatches in values and expectations: The Services should "tell it like it is" as a means of reducing later dissonance, dissatisfaction, and attrition. Realistic and comprehensive career information should be provided in both its negative and positive aspects (Mobley et al.; M. Greenberg; Belknap; Wiskoff).

(Note: The last two sections, on the recruiting process and expectations of first term enlistees, reiterate a theme that occurred repeatedly in the conference: Aspirations about service life and realities sometimes are out of line, and this may contribute to attrition. We wish to underscore the point because several speakers did so.)

Enlistment incentives. Develop, and test in field experiments, a system of differential incentives. It is known that certain features of a military enlistment are more attractive than others to particular

groups. For example, high school graduates in the higher mental categories tend to value deferred rewards such as post-service educational benefits; on the other hand, school dropouts often perceive immediate monetary rewards such as bonuses or technical training as the most appealing enlistment incentives. Can the Services' recruiting commands offer incentives that are tailored to the needs and interests of particular subsets of youth? The purpose of this research would be to reduce attrition by giving enlistees the rewards they care about most (Canter; Wiskoff).

Benefits. Determine first termers' perceptions of the erosion of benefits, and the extent to which these perceptions are influencing attrition.

Pre-recruit indoctrination. Conduct exploratory studies and experiments on the value and feasibility of pre-recruit training and indoctrination. Can the British practice of offering a five-day, no-strings-attached trial of Navy life be effective in winning and retaining recruits?

Job Change and Mobility

Motivation to change jobs. Conduct research into why young men and women leave their first jobs. Very little is known about the demographics of leavers, although there are a number of hypotheses used to explain early job mobility (Kohen).

In-service job flexibility. Investigate the cost and feasibility of providing flexible job assignments during first enlistments. This research would examine the value of providing for job change. It stems from the knowledge that there is a high rate of change in general in the labor market and it assumes that perhaps military recruits ought not to be expected to behave differently. The objective of this effort is to reduce attrition through the provision of second or third chances as opposed to the relatively rigid one-enlistment, one-job tradition (Kohen; Gottlieb). (This concept runs counter to the notion of the "regimental" idea mentioned earlier; obviously tradeoffs would have to be established.)

Career choice. Conduct research on how individuals' decisions about job choices impinge on mobility and attrition. There is a body of knowledge that suggests that adults do not always make very good choices among job alternatives; consequently, many quit and take up other options. If this is so, youth cannot be expected to make better decisions than older men and women. Have job-choice decisions changed significantly in recent years? Do youngsters tend to view all jobs as trials, without any obligation for long-term commitment?

New Data Requirements

Data bases. Develop standardized data collection instruments for the routine accumulation of information about all attriting personnel.

These instruments should be similar for each of the Services, to permit comparative analysis, and they should be applicable to all phases of first enlistments. The objective of this research is to build time-series data that will permit the orderly investigation of attrition as it takes place (M. Greenberg).

- Develop ways to routinely and continuously integrate personnel assessment data. The data might include individual measures of aptitude, reading level, vocational interest, and high school record, as well as Service criteria (e.g., recruit training performance). Also include peer ratings, and update them on a regular basis. Assessment should not cease once a new recruit has begun training. For example, probability estimates about success or failure are made for new service personnel but they are never updated as service experience accumulates. That is, the pre-service predictions of whether an enlistee will successfully complete his enlistment should be routinely updated or refined as individual servicemen proceed through their enlistments (Wiskoff).

- Develop another type of data base dealing with organizational characteristics, i.e., mission, extent and quality of manning, etc., so that attrition can be tracked in terms of organizational variables as well as individuals.

Project 100,000. Investigate the feasibility of analytic studies of data collected on Project 100,000, since these data are potentially instructive for today's attrition problems. (We don't know the extent to which information from these data can be extrapolated to the present volunteer force, and this question should be part of the research.)

Management data. Develop new sources of information on the management aspects of attrition decisions. This could be accomplished through involving the "boss's boss" in the exit interview process. Also, develop and test ways of following up exit interviews with 30- to 60-day post-service, mailed questionnaires (Belknap).

Feedback. Develop new high speed survey techniques for sampling attitudes of both attriters and adjusted personnel. A consumer panel approach might be an appropriate way to obtain fast turnaround and accurate responses. (Note that this approach is not limited to attrition matters and its application would serve to clarify many personnel issues for top managers.) (Belknap)

The Job

Job redesign/job enrichment. Conduct research on ways to design jobs so as to increase the satisfactions of their incumbents (Hulin).

- Develop and test ways to make entry level jobs challenging and interesting. (This approach assumes that the nature of the job is contributing to attrition.) Work assignments, for example, could be made more complex as a way of testing the capabilities of high-level or more

experienced enlistees (Holz & Schreiber). Develop imaginative ways to reduce the boredom that is present in many service jobs.

Job satisfaction. Apply known techniques for the measurement of job satisfaction. This would provide information on the relationship of satisfaction to attrition, and on how to use measures of job satisfaction as an early warning of potential attrition.

Service training and career training. Initiate research on the extent to which attrition is driven by a perceived lack of relevance of service training to post-service career plans. Determine to what extent some first term personnel develop and retain high motivation to remain in the service because they feel that their military training is good preparation for a later job (Canter).

Occupational specialties and attrition. Continue the investigations of personnel effectiveness as a function of military occupational specialty and expand this research to all Services and a wider sample of occupations. Develop special interventions for jobs that show high attrition (Gunderson & Holberg).

- Recognize differential attrition rates and causes among military occupations and test appropriate management options for each. For example, we do not know whether "up or out" induces attrition or, if it does, the magnitude of the effect on first termers (Canter).

- Analyze the need for unique work scheduling, assignment, and leave policies for different job clusters. This is a highly promising area, and, if early findings are shown to be broadly characteristic, it can lead to a number of corrective actions (Canter).

Management training to enhance motivation. Develop and test training approaches that will sensitize military managers to the impact of the work environment on performance and attrition. First termers may find themselves in work situations that are demotivating. Services' managers commonly blame the screening process that admitted these people. But in a peacetime force that is facing a dwindling labor supply from which to draw, the possibility of change within the organization needs to be considered.

"person-job match." Emphasize research on ways to merge traditional psychometric approaches, i.e., the measurement of human attributes, with recently developed techniques for measuring job characteristics. The objective would be to build optimization techniques for pairing people with particular job demands. This area relates to the attrition problem because it addresses new ways to manage people of lower aptitude more effectively and also to use scarce high ability people where they are most needed.

Personnel Management

Levels at which attrition decisions are made. Analyze the differences in the Services' practices vis-a-vis the degree of central control over individual attrition actions. Are there administrative-cost and functional differences in the ways the Services manage attrition? How does the degree of decentralization influence the number of early discharges? Are there qualitative differences among the people who leave the Services under the various programs? Do the more centrally controlled systems provide an integrated perspective? Are practical differences more apparent than real? The purpose of this research would be to understand how different ways of administering attrition affect the Services' understanding and control of the phenomenon. Research would not aim at eliminating differences, but it would seek ways that the Services could take advantage of one another's experiences.

- A related matter is the extent to which losses under various discharge programs could be reduced by the application of diagnosis, intervention, and follow-up procedures. Techniques should also be developed to enable unit commanders to identify potential attritors who could benefit from special attention or counseling.

Optimum attrition rates. Develop methods for determining optimum attrition rates. There will and should be some attrition during first enlistments; but there are now no acceptable guidelines, particularly at the lower limit, of what the rate should be. Nor is there any apparent reason that attrition should be similar across the Services or, within a Service, or different occupations. The objective of this research would be to establish the feasibility of setting retention goals based on non-arbitrary standards.

Managing marginal personnel. Build special R&D programs that deal with marginal people, i.e., low aptitude, non-school-graduates.

- Conduct administrative experiments on the practice of recycling selected recruits as tutors and role models for marginal performers. A variation of this would be to institute a buddy system in recruit training and first job assignment.

- Develop special leadership approaches to marginal people. Concentrate on modifying poor work habits, providing feedback on performance, and building commitment and a need to belong to the unit and succeed there (Carter).

- Try out and experimentally assess known techniques that accommodate to the less apt recruit. These approaches could include criterion-referenced testing and self-paced instruction.

- Test the feasibility of assigning recruits who are able to proceed through training at a fast pace to additional schools or to operating

units when they have completed training rather than requiring them to mark time. Some high quality attritors have said they left the service because their jobs were not demanding enough. There is evidence that some enlistees say they would like to have been assigned to certain jobs but weren't. In such cases as the latter, we do not know how attrition is affected, if at all. Can more attractive jobs be assigned to outstanding enlistees who know what they want of the military service? (Canter)

- Build special R&D programs that deal with marginal people, i.e., low aptitude, non-school-graduates.

These recommendations stem from the recognition of a wide range of individual differences in the way people learn, their retention span, and their rate of learning. It has also been established that, given enough time, the appropriate mode of instruction, and effective teachers, most people can be trained for most jobs. Therefore, it might not be effective or practical to continue to select and classify on the basis of "cut scores." That is, the need for the traditional mode of dealing with large numbers of people on an actuarial basis has been eliminated by computer technology, which makes it possible to assign, train, and manage the careers of people of widely varying abilities.

Voluntary release. Expand current field experiments dealing with voluntary release practices. The Navy's "voluntary out" experiment, which provides for a virtual "walk-away" by selected enlistees during their first 180 days of service, aims at reducing later attrition by encouraging separation on the part of people who would eventually become problems. Thus, the program assumes that early attrition is less costly than later attrition and that the voluntary aspect does not create more attrition overall. Another important and positive aspect of voluntary release is that persons who do not avail themselves of the option may be assumed to be making a "second commitment"; consequently, such individuals might be expected to be productive during the remainder of their enlistments.

The purpose of this research would be to learn more about the probable effect of the introduction into military life of a significant characteristic of civilian occupations: the non-binding nature of the employment agreement. The hypotheses mentioned above would be tested. Research would also provide useful information on ways to reduce attrition-related costs such as correctional penalties for unauthorized absence (R. Guthrie).

"Opt-furlough" programs. Conduct experiments on "option-furlough" practices as an alternative to voluntary release or easy-out programs. Would furloughs granted to some would-be attritors as a way of dealing with personal problems serve to alleviate the pressures driving toward dropping out? Would furloughs provide an opportunity to explore employment options outside the DOD before final, and perhaps ill-considered,

attrition decisions were made? What would opt-furlough cost in terms of turbulence and would it affect readiness?

Special Training Approaches

Behavior rehearsal. Develop and test behavior-rehearsal techniques that can enable marginal enlistees to learn effective coping mechanisms. In particular, many first termers lack some of the rudimentary skills needed to adjust to the demands of military life; this may lead to alienation and isolation, a lack of commitment, perceived conflicts between one's own and the larger group's life styles, impulsive behavior, and an inability to control that behavior. Training in coping, whether by behavior rehearsal or some other technique, should be tested very early during recruit training and it should involve all recruits, not just those identified as marginal (Jenkins).

Coping skills. Identify the main elements of a training program that includes novel (for recruits) sets of social relationships, disciplinary requirements, and job demands. What are the behavioral deficiencies—such as impulsive behavior, inability to seek help, or lack of awareness of the effects of one's behavior on others—related to attrition? How can distractions be minimized? How does one deal with frustration? Basic research on some of these issues has been conducted on non-military groups with promising results. The purpose of this recommendation is to expand previous work into military settings and to test its impact in terms of reduced attrition.

- Another application of training in coping skills could be made to the world of the recruit trainer. Supervisors, e.g., drill instructors, might benefit from special training in how to cope with the unique demands placed on them and how to become effective role models. NCOs in general might also profit from the results of this research.
- Work on coping should also investigate the more general question of why some people are successful in high-stress occupations (Sarason).

Predicting Attrition

Selection. Test and expand the application of the Air Force's Motivational Attrition Prediction (MAP) model as a way of screening out high risk attrition candidates (Dempsey).

- Continue to support other applied research that has as its objective the enhancement of the selection process: e.g., improved, pre-service measures of reading ability, and better predictors of motivation.
- Continue research aimed at improving, perhaps on a "lead service" basis, the Armed Services Vocational Aptitude Battery (ASVAB). This test has been criticized as ineffective for selection and classification. In fact, ASVAB may be a measure of reading comprehension and its utility

therefore constrained by the literacy skills of the youth who take the test (Canter; Wiskoff).

Pre-induction screening. The Services should continue their efforts to differentiate would-be leavers from stayers.

Identify from among those who attrite: 1) those whom the Services want to separate, and 2) the leavers whom the Services would prefer to have retained. Can the latter group be identified for special interventions? Furthermore, since the two groups may leave for different reasons, would overall prediction accuracy be enhanced if they were considered separately for analytic purposes? Research in this area has two goals: 1) to improve DOD's ability to identify would-be attritors, and 2) to make it possible to prevent the departure of those the Services would prefer to retain.

- Can the use of special assessment centers, an approach that has worked in industry as a post-induction screening technique, be applied successfully? (Any screening activity should be approached cautiously because it creates a danger of generating self-fulfilling prophecies.)

Peer ratings and assessment. Exploit the use of peer ratings. Evidence is available to suggest that such ratings could contribute significantly to the Services' attrition decision process. At the same time, work should be initiated to learn why many presumed high-attrition-risk individuals, e.g., non-high-school-graduates, manage to succeed in their enlistments. This research could help define the characteristics of desirable role models for other high risk recruits.

Human Factors Engineering

Investigate the contributions of human factors approaches to the design of military systems and equipment, and their impact on attrition. Little is known about the relationship of specific hardware configurations to attrition. For example, does poorly designed equipment result in poor performance which, in turn, leads to dropping out? Do the maintenance demands of some complex equipment exceed the ability of the average technician to the extent that he cannot satisfactorily do his job? Given the spectrum of ability levels expected for military manpower during the coming years, should the Services require equipment to be compatible with a wider (i.e., lower) range? Anticipating larger numbers of women, and more occupational specialties open to them, should anthropometric designs be modified accordingly?

(NB: This report does not deal with attrition problems of military women per se because the issue was never raised in the conference. In fact, it was shown that the attrition rate for women, traditionally much higher than men's, has come down to the point that it is actually lower than men's (Martin). The increasing numbers of accessions of women, however, together with expanding job opportunities for women in the

Services, may lead to new problems and a reversal of the current downward attrition trend. This is because the generally higher quality level of women will probably drop to approximate that of male accessions.)

Societal Trends

Continue to conduct longitudinal research on societal trends in the nation as a whole with respect to indicators of disaffection or non-commitment. How do such trends as divorce rates or civilian labor market turnover relate to attrition from military service? Does the changing image of service, said to be shifting from that of a profession to that of an occupation, contribute significantly to attrition by a general lowering of commitment? (Moskos) To what extent is the military subculture, particularly that of first term enlistees, a microcosm of the larger society? If the relationship is a close one, can DOD develop monitoring techniques that will enable it to anticipate changes in the values and attitudes of its new volunteers?

Economics of Attrition

Underlying nearly all of the issues in the preceding recommendations is the general question of cost.

On the one hand there is the problem of cost benefits for each research area. How much will these efforts cost and what payoffs will accrue from them?

A different critical issue, particularly in terms of the DOD goals to reduce attrition costs and the Services' goals to discharge undesirables, is this: How much does it cost to retain personnel who might otherwise be attritors under current policies?

POLICY AND ACTION RECOMMENDATIONS

Although it was not an objective of the conference to generate action recommendations, a number of policy changes were proposed during the meeting. These recommendations were made mainly in the workshop sessions. Some arose in formal papers, however, and from the comments that followed them. The discussants also suggested policy changes that might serve to ameliorate the current attrition situation.

These suggestions do not represent group or consensus positions; many recommendations were made by individuals.

Before a point-by-point listing of specific items, a general comment is in order: Some conferees took the position that there already exists enough information for defense manpower managers to "solve" the attrition problem and that application of this knowledge, rather than more research, should be the main course of action. It was felt that much more is

known from a scientific and technical point of view than is being applied. One workshop chairman wrote, "There is some feeling that few if any answers to the attrition problem are new. . . . Many in my group feel we know pretty well the problem and the alternative solutions. It's a matter of willingness to implement policy." Others took this middle position: There is a great deal known that might be useful, but most of this knowledge has not been validated. The argument continues, then, in favor of mounting administrative or field experiments as a way of testing new policy actions. This position seemed to emerge as one of the major outcomes of the conference, and it should be kept in mind as the following policy proposals are considered.

Defense Missions and Attrition

In peacetime the missions of defense are complex and may even appear to call for contradictory personnel policies. An obvious mission is military readiness, and to this end it makes sense to identify potential attritors earlier in their enlistments and return them to civilian life. Less apparent, however, is another goal of defense, i.e., the training of relatively large numbers of people who return to civilian life but are prepared for possible recall in the event of emergency mobilization. For the latter goal, an "early and easy" attrition policy may prove to be counterproductive because it could deny to the DOD the availability of large numbers of veterans for the ready reserve.

If the long range national interest is the second goal, i.e., to provide some military training to a wide range of eligible people, then the Services should define their policies on attrition so as to maximize the number available for later recall. This may be counter to the short term objective of military leaders, i.e., a current high state of readiness; but it may be more compatible with the general peacetime situation.

Complicating mission statements and their related policies is the prediction of shrinking manpower pools in the coming decade. If the availability of eligible youth does diminish, then the current emphasis on easy or capricious rejection of people, either before or during enlistment, will be impractical.

The point of this recommendation is to urge a clarification of defense missions as they relate to attrition along with the recognition that the relationship is complex and not well understood.

Should the Services accept, on behalf of the larger society, some responsibility for training young people—both remedially and for post-service careers? The answers to these and related questions, and the incorporation of them into recruiting and training policies, might serve in the long run to influence attrition.

Easy Discharge

Reconsider the Services' present easy discharge procedures because they may be inimical to the maintenance of required force levels. These procedures might also be counterproductive in that they encourage military managers to get rid of marginal people rather than try to turn them around through counseling or other approaches. Easy discharge programs may also deny young first termers a cooling off period in which to reconsider their sometimes precipitous decisions to leave.

Up or Out

Modify the current up-or-out practice that leads to continuing demands for large numbers of entry-level people. The Services should recognize that some low-skill-level occupations do not require an exclusively youthful labor force. It is not the case that all entry-level personnel are motivated toward promotion or that long term job satisfaction is a correlate of advancement. The Civil Service does not employ an up-or-out philosophy, nor do most blue collar, non-military career systems. Certainly there are particular jobs, e.g., those in the combat arms, that demand the physical vigor of youth, and they are appropriately dealt with by the present policy. But many other job areas could be filled by long term, low-pay-grade personnel. There have been indications that some first term personnel would be willing to remain in their grades without further promotion, and this might be worth investigation.

Questions that might require analysis are: What are the tradeoffs, in recruitment and retirement costs, of having individuals stay longer in lower level positions? What are these costs if the entry age is raised?

Rotation

Modify overseas rotational policies so that there will be a more equitable amount of time spent stateside by different occupational groups.

Personal Rights and Entitlements

Make clear to first term personnel, at the time of recruitment and periodically during their enlistment, the avenues that are open to them when personal problems arise. This includes careful and intelligible explanations of grievance procedures, availability of counseling, emergency leave policies, the Uniform Code of Military Justice, and so on.

Special Concessions

Create new, non-standard tour lengths for unattractive jobs. For example, Navy boiler tenders are known to work under unusually arduous conditions and they are known to attrite at a higher-than-average rate. For such specialties the Services could arrange short assignments or other incentives that recognize special hardship conditions. A non-

military example is the recognition by U.S. Civil Service regulations of the stressful nature of certain jobs. Retirement policies for air traffic controllers, for example, are more lenient than is generally the case for other civil servants.

Training

Current training policies can be modified in several ways:

- Make recruit training more like the "normal" service life. Also, modify training to provide a realistic orientation about what to expect on the job.
- Use the concepts of "one station unit training" or "one station training," and other variations, to provide a natural laboratory for evaluating the impact of unit training on attrition.
- Eliminate non-training diversions from basic and advanced training.

Literacy training. Because there is evidence that low aptitude, low performance first termers have had pre-service problems in dealing with written materials, literacy measurement and remediation should receive high priority.

Enlistment Contracts

Enforce enlistment contracts in a manner similar to non-military contracts. That is, if an individual wishes to break his agreement to complete his service, he should be taken to a civil court rather than be summarily given a less-than-honorable discharge. Civil enforcement would thus serve to protect the individual from being labelled in a way that would affect his subsequent employability. Due process would also protect the government's investment in recruitment and training by providing an opportunity to keep the individual on active duty. The use of civil proceedings would slow some of the very fast, and perhaps regrettable, attrition decisions that are possible under current rules.

Brief Enlistments

- Renew the two-year enlistment option but provide no formal training beyond recruit training to people who exercise this option. This recommendation assumes that brief enlistments will attract higher quality enlistees and that higher standards will result in lower attrition.

- Conceptually, this policy could be extended to another that would reinstate the "citizen soldier" option: Offer a short term, non-career enlistment that would provide post-service incentives, e.g., the GI Bill, attractive to high quality youngsters. Evaluate the policy by following up the enlistees who take advantage of it; observe their attrition rate (Segal).

- Determine the relation of tour length to attrition.

Inter- and Intra-Service Transfers

Test, on a pilot basis, the policy that would permit "Type One" attritors, i.e., those whom the Services may wish to retain, to transfer to another Service without penalty. Also initiate a policy that permits military personnel to opt for transfer to new units instead of being discharged as attritors. This would provide a second chance for success in a new organizational setting.

Miscellaneous Unit Management Techniques

Several recommendations come under this heading:

- Develop an "early warning" attitude detection system that will identify individual would-be leavers in time to permit intervention by their NCOs and commanders. Consider, in particular, the development of innovative unobtrusive techniques.
- Test the effectiveness of career counseling as a way of demonstrating that the Service and its subordinate units are concerned with the welfare of individuals (Porter & Steers).
- Develop ways that permit and encourage supervisors, managers, and first term enlistees to jointly "work out" solutions to problems and thus obviate the need for separation. Provide methods for discouraging those three classes of people if any of them initiates separation proceedings—and test the effectiveness of the methods on attrition and disciplinary action.
- Take a hard look at innovative approaches such as the Marines' new "leadership improvement" program, and, where they do pay off, extend them to field trials in the other Services.
- Determine the effects of punitive measures taken against AWOLs, especially with respect to attrition decisions.

* * *

Clearly these policy suggestions are neither all new nor all of equal merit. Some of the recommended actions are untried, and they will need careful analysis and field tryout before being implemented. Others could be adopted without delay.

As a general strategy for developing new manpower policy, it would appear that planners should pursue an "evolutionary adaptive" course. This is a scheme that guides and encourages small policy adjustments whose effects can be carefully followed. The benefits of this approach

are: 1) managers are encouraged to adapt their policies to specific situations, 2) general policies can evolve into detailed or situation-specific policies, and 3) the chances of large negative effects are minimized because change takes place in small increments, each of which is tracked.

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LTCOL R. E. Wilkinson	Office of the Deputy Chief of Staff Research and Development, HQ U.S. Air Force
COL Willis G. Womack	Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs)

APPENDIX B

DOD/ONR Conference on First Term Enlisted Attrition

Xerox International Training Center, Leesburg, Virginia - April 4-7, 1977

PROGRAM

Monday, April 4

PM

4:30 Registration

5:30 Dinner

8:30 Keynote address

It's a new ball game: changing
expectations of military service

Prof. Charles E. Moskos
Northwestern University

Tuesday, April 5

AM Chairman: Dr. Glenn L. Bryan, Office of Naval Research

8:30 Introduction, welcome,
objectives, modus operandi

Dr. H. Wallace Sinaiko
Smithsonian Institution

First Term Enlisted Attrition in the DOD

8:45 Trends in DOD attrition

Dr. A. J. Martin
Office of the Assistant
Secretary of Defense (MERA)
Mr. Craig Foch and
Dr. Nicki King
The Rand Corporation

9:45 Gatekeepers: first term enlisted
attrition policies & practices

10:30 BREAK

10:45 The Army and attrition

MAJ Arthur A. Schulz, USA
Training and Doctrine Command
MAJ I. N. Evonic
Canadian Personnel Applied
Research Unit

11:15 Canadian forces' solutions to
attrition

12:00 LUNCH

PM Organizational Factors - Chairman: Dr. Bert T. King, ONR

1:30 Attrition: the absorption and
integration of newcomers

Dean David Gottlieb
University of Houston

Tuesday, April 5, continued

PM Organizational Factors, continued

2:00	Organizational commitment and personnel attrition	Prof. Richard M. Steers University of Oregon and Dean Lyman W. Porter U. of California, Irvine
2:30	Post high-school drop-outs (and stayers)	Prof. David R. Segal University of Maryland, and Dr. Jerald G. Bachman University of Michigan
3:00	BREAK	
3:15	Individual differences, organizational characteristics, and environmental influences on voluntary termination decisions	Prof. Charles L. Hulin University of Illinois
3:45	A longitudinal study of enlisted personnel attrition in the U.S. Marine Corps: preliminary recruit training results	Profs. William H. Mobley, Herbert H. Hand, and John E. Logan University of South Carolina
4:15	Exploratory development research of U.S. Navy/Marine Corps personnel - Phase I: factors affecting attrition	Dr. Marshall G. Greenberg and Mr. Jerry McConeghy Booz, Allen Applied Research
4:45	ADJOURN	
7:30	<u>Workshops</u>	

Wednesday, April 6

AM Job Factors - Chairman: Dr. Robert W. Stephenson, Air Force Human Resources Laboratory, Lackland AFB

8:30	Job changing behavior of young men in the civilian labor market	Prof. Andrew I. Kohen Madison College
9:00	An industrial experience: what drives attrition?	Mr. William Belknap Xerox Corporation
9:30	Organizational effectiveness and military personnel attrition: DOD management, policy, research issues, and some military service alternatives	Dr. Ralph R. Canter Army Research Institute
10:00	BREAK	
10:15	Minimizing adjustment problems and attrition rates of minority military first term enlisted men	Prof. Louis I. Jenkins Pepperdine University

Wednesday, April 6, continued

AM Job Factors, continued

10:45	Psychological coping skills and the reduction of attrition among military personnel	Prof. Irwin G. Sarason University of Washington
11:15	Quality and requirements - a step toward reconciliation	ILT Jack R. Dempsey and CPT Jonathan C. Fast AF Military Personnel Center

11:45 LUNCH

PM

1:30 Round Table: Management Actions to Control Attrition - Chairman: Dr. Robert J. Lundegard, Office of Naval Research

Major General Bennie L. Davis, USAF
Director of Personnel Plans
Vice Admiral John G. Finneran, USN
Deputy Assistant Secretary of Defense (Military Personnel Policy)
Brigadier General Richard C. Schulze, USMC
Director, Manpower Plans and Policy Division
Rear Admiral William R. Smedberg, IV, USN
Deputy Chief of Naval Personnel for Personnel Planning and Programming
Major General Paul S. Williams, USA
Director of Military Personnel Management

3:30 BREAK

Cost Factors and Field Studies - Chairman: COL Tyree Newton, Air Force Human Resources Laboratory, Brooks AFB

3:45	Navy voluntary release pilot program	Dr. Robert V. Guthrie Navy Personnel R&D Center
4:15	Personnel effectiveness in the all volunteer Navy	Dr. E. K. Eric Gunderson and Ms. Anne Holberg Navy Health Research Center
4:45	Attrition costs in the Navy and Marines	Mr. Daniel F. Huck and Mr. Dale Midlam General Research Corporation

5:15 ADJOURN

7:30 Workshops

Thursday, April 7

AM Individual Factors - Chairman: Dr. Jay Uhlener, Army Research Institute

8:30	Selective overview of NRPDC enlisted attrition R&D	Dr. Martin F. Wiskoff Navy Personnel R&D Center
9:00	USAF attrition trends and identification of high-risk personnel	Dr. Nancy Quinn AF Human Resources Laboratory
9:30	Predicting attrition: a test of alternative approaches	Dr. Robert F. Lockman and Dr. John T. Warner Center for Naval Analyses

10:00 BREAK

10:15	Research developments and new dimensions of potential Army attrition	Dr. Myron A. Fischl Army Research Institute
10:45	Quality of Marines: test scores, personal data, and performance	Dr. Warren T. Matthews Center for Naval Analyses
11:15	Increasing the retention of Army volunteers: meaningful work may be an answer	Dr. Robert F. Holz and Dr. E. M. Schreiber Army Research Institute

11:45 LUNCH

PM

1:30 Wrap-Up - Chairman: COL Henry L. Taylor, Office of the Director of Defense Research and Engineering

Discussants:

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Army Research Institute
Prof. George M. Guthrie
The Pennsylvania State University
Prof. Jack Ladinsky
The University of Wisconsin
Dr. Howard McFann
Human Resources Research Organization
Prof. Robert D. Pritchard
Purdue University
Dr. Lonnie D. Valentine, Jr.
Air Force Human Resources Laboratory

Workshop Reports

3:30 Final Remarks - Mr. Irv M. Greenberg, Deputy Assistant Secretary of Defense (Manpower and Reserve Affairs)

Workshop ChairmenDOD/ONR Conference on First Term Enlisted Attrition

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